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First record of *Neotomys ebriosus* Thomas, 1894 (Mammalia: Rodentia: Sigmodontinae) from Tucuman province, northwestern Argentina

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Abstract. *Neotomys ebriosus* Thomas, 1894 (Mammalia: Rodentia: Sigmodontinae) is a monotypic genus of sigmodontine rodent restricted to the Central Andes of South America. Its distribution is inferred from a few localities; although some maps include Tucumán province, in northwestern Argentina, within the range of this species, previous records are not known. Here, we report from Cerro Muñoz (Tafí de Valle Department) the first documented record for the province.

Key words. Andean Swamp Rat; cloud grasslands; distribution; Puna; Aconquija

The Andean Swamp Rat, *Neotomys ebriosus* Thomas, 1894 (Mammalia: Rodentia: Cricetidae) (Fig. 1), is a rodent endemic to the Central Andean highlands, ranging from about 10° S in central Peru southward throughout western Bolivia and northern Chile to northwestern Argentina at about 29° S (Ortiz & Jayat 2015). However, it is only known from a few specimens and localities, and thus, much about its distribution, natural history, and patterns of geographic variation are still poorly understood (Ortiz & Jayat 2015). Until recently, this monotypic genus was considered as "incertae sedis" in the suprageneric classification of sigmodontinae rodents (D'Elía et al. 2006, 2007, 2015), but they are now known to constitute a well-supported "Andean clade", together with *Euneomys* and *Irenomys* according to molecular data (Martínez et al. 2012). Thus, this clade was included in a new tribe, Euneomyini (Pardiñas et al. 2015). In Argentina *N. ebriosus* is known from Jujuy, Salta, Catamarca, La Rioja and San Juan provinces (Barquez 1989, Jayat et al. 2011). Herein, we provide the first reliable record from Tucumán province of this enigmatic rodent and refine the known distribution of this species.

Our new record is from Cañada del Fuerte Viejo, Cerro Muñoz, (26°53′41.00″ S, 065°48′40.32″ W; 3300 m above sea level), Tafí del Valle Department, Tucumán province, Argentina (Fig. 2). The specimen was captured during a field trip on 14 July 2016 in a Sherman-like trap set in a 5 × 5 trap grid (25 traps, each separated by 15 m), located on a cushion peatland covered by bunch grass. The specimen was preserved as a skin and skeleton under the field number LIF 950 (Luis Ignacio Ferro field catalogue) and deposited at the Colección Mamíferos Lillo (CML 10859), Facultad de Ciencias Naturales e Instituto Miguel Lillo, University of Tucumán.

Neotomys ebriosus is distinctive because of its strongly rufous muzzle, the presence of hairs of the same color at the base of the ears and on the rump, the length of the tail shorter than the head and body combined, and by the characteristic longitudinal grooves along the labial borders of the upper incisors (Fig. 1). Another species of rodent having a rufous muzzle and short tail is *Abrothirx jelskii* (Thomas, 1894), which is sympatric with *N. ebriosus* at several localities along their ranges. However, *A. jelskii* is much smaller, has a marked contrast between dorsal (gray) and ventral (white) pelage, and has white postauricular patches which are absent in *N. ebriosus*. In *Neotomys* the ventral hairs are plumbeous at the bases and white at the tips and thus conferring an overall

Figure 1. Photograph of the living specimen of *Netomys ebriosus* (CML 10859), showing some distinctive characters of the species, as the rufous muzzle and ears, and the short tail. Inserted is a photograph of the distinctive upper incisors grooves.

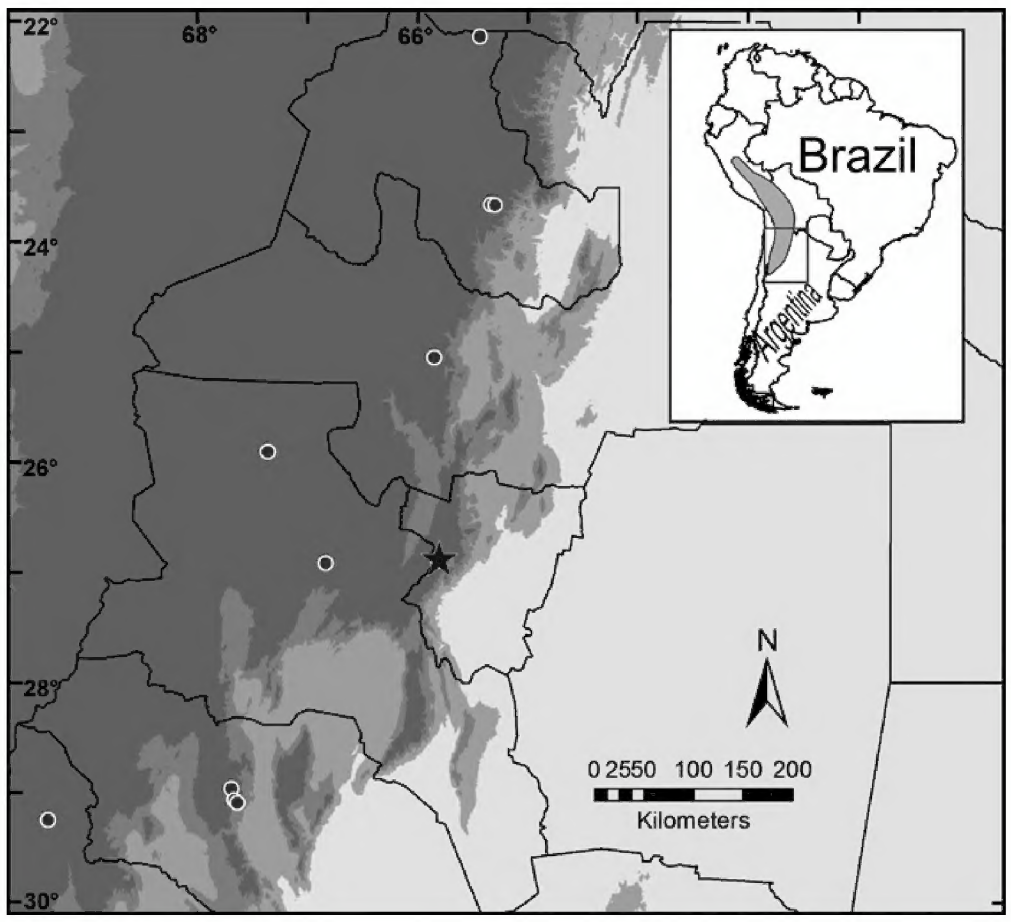

Figure 2. Localities of occurrence for *Neotomys ebriosus* in northwestern Argentina. Dots indicate previous published records. 1: Yavi, Jujuy province (PARDIÑAS & ORTIZ 2001); 2: Sierra de Tilcara, Jujuy province (DÍAZ & BARQUEZ 2007); 3: Valle Encantado, Salta province (PARDIÑAS & ORTIZ 2001); 4: Paycuqui, Catamarca province (specimen revised by the authors CML 6893); 5: Barranca Larga, Catamarca province (PARDIÑAS & ORTIZ 2001); 6: Famatina range, La Rioja province (JAYAT et al. 2011); 7: San Guillermo National Park, San Juan province (BARQUEZ 1983). The star indicates the new record from Tucumán province. The gray area in the insert map shows the entire distributional range of *Neotomys ebriosus*.

grizzled greyish color with a gradual contrast between dorsal and ventral regions. Among cranio-dental characters, a longitudinal groove along the labial border of the upper incisors is characteristic. For further information on this species, see THOMAS (1894), SANBORN (1947), STEPPAN (1995), PARDIÑAS & ORTIZ (2001), and ORTIZ & JAYAT (2015).

The presence of *N. ebriosus* in Tucumán province was known only by a fossil mandible exhumed from Pleistocene sediments in La Angotura (Tafí del Valle department), 1900 m (PARDIÑAS & ORTIZ 2001). During the Pleistocene glacial maximum, down-slope migration of the vegetation belt would have allowed for the presence of *N. ebriosus* at lower elevations. However, high-altitude habitats in Tucumán are inaccessible by road, hindering knowledge of the sigmodontine fauna in the highlands of the province (FERRO & BARQUEZ 2008). Our new record is especially significant because high-altitude environments and the sigmodontine fauna are among the least studied in northwestern Argentina and particularly in Tucumán province. The nearest known occurrence of *N. ebriosus* is probably that reported by THOMAS (1926) from the "Aconquija Mountain, Catamarca", but the exact location of this record remains unknown and could be anywhere along the approximately150 km long mountain range. Our new data adds *N. ebriosus* to the list of living sigmodontine rodent species of Tucumán province; it refines this species' known distribution with an extension of 100 km to the east from the closest known record (Barranca Larga, Belén Department, Catamarca). The specimen we report here was captured in a cloud grassland belonging to the Yungas ecoregion, together with tree other sigmodontine rodents: *Akodon spegazzinii* THOMAS, 1897, *Phyllotis tucumanus* THOMAS, 1912 and *Andinomys edax* THOMAS, 1902

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Figure 3. Photograph of the collecting area of *Neotomys ebriosus* (CML 10859) in Tucumán province. Biogeographically corresponds to the uppermost vegetation formation of the yungas forest: the cloud grasslands on the eastern slopes of the central Andes. The specimen was captured among the bunch grasses next to the riverside.

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